

**REMARKS**

In the present Amendment, claim 21 has been amended to recite that ceramics bind with the pigment and the extender material to form a skeleton. This amendment is supported by the specification, for example, page 7, lines 19 to 20; page 10, lines 4 to 10. Claims 1-7, 10-12, 16-18 and 20 were previously canceled. No new matter has been added.

Upon entry of the Amendment, claims 8, 9, 13-15, 19 and 21 will be all the claims pending in the application.

**I. Response to Rejections under 35 U.S.C. §§ 102(b) and 103(a)**

a. Claims 8, 9, 13-15 and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,358,495 to Nishihama et al., as evidenced by Encarta<sup>®</sup> World English Dictionary, North American Edition, © and (P) 2009.

b. Claims 8, 9, 13-15 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,579,530 to Appel et al.

Applicant respectfully submits that the present claims are novel and patentable over the cited references for at least the following reasons.

Independent claim 21 recites a stick type cosmetic comprising a porous material which comprises at least a pigment, an extender material and ceramics which have pores of a diameter falling in a range of 50 nm to 500 nm and which bind with the pigment and the extender material to form a skeleton.

When the cosmetic of the presently claimed invention is applied to skin, it breaks and expands a coloring agent on the skin, and is excellent in coloring property on the skin (due to non-sintering), but usually keeps a stick shape (due to good mechanism strength).

Nishihama et al. discloses a lipstick (a stick type cosmetic) having protective ability of UV which is produced with cooling and solidifying a mixture obtained by dissolving the

titanium-silica complex and other ingredients of wax, resin, oils, coloring agent etc. with heating (Formulation Example 4). That is, the lipstick described in Nishihama et al. is not a stick type cosmetic in which a pigment, an extender material and a porous material having a pore diameter of 50 nm to 500 nm form a skeleton.

Encarta® is cited as defining the diameter of a mesopore and thus does not rectify the above noted deficiencies of Nishihama et al.

Appel et al. discloses a make-up stick or crayon obtained by mixing powdery components by adding water and extruding the homogeneous mass to form a rope which is then cut into lengths (Abstract).

It is noted that the stick type cosmetic in the presently claimed invention is not obtained by sintering at high temperature (Comparative Examples 1 to 3) or cooling and solidifying ingredients (Comparative Example 4).

Applicant submits herewith microscope photos and electron microscope photos to show the differences between the stick type cosmetic recited in present claim 21 and those of Nishihama et al. and Appel et al.

Specifically, microscope photos 1 and 2 (same photos except magnification) show a lipstick produced according to a method described in Nishihama et al. It is noted that this lipstick cannot be observed by an electron microscope because wax is melted. In the photos, metal glossy parts are sites where a pearl pigment is exposed and black parts are sites where porous powder and the other components are buried in wax. As seen from the photos, various powders are buried in wax, and therefore a porous material is not distinguished from other non-porous particles (powders). In this state, pores of the porous material are completely clogged so that any additional component cannot be introduced into the pores after preparing the lipstick.

This state is applied to the cosmetic pencils disclosed in Appel et al. because they are produced by a similar process to that described in Nishihama et al.

On the other hand, a stick type cosmetic of the presently claimed invention is produced by heating the raw materials with microwave heating at a low temperature to obtain a stick comprising a porous ceramic having good applying feeling.

As seen from the electron microscope photos 3 (same photos except magnification), a skeleton comprising the ceramics and pores which are formed in the skeleton and gaps in the skeleton can be observed.

As shown above, the stick type cosmetic of the presently claimed invention is different from those disclosed in Nishihama et al. and Appel et al.

In view of the foregoing, Applicant respectfully submits that claim 21 as well as dependent claims 8, 9 and 13-15 is patentable over Nishihama et al. and Appel et al., and thus the rejections should be withdrawn.

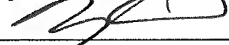
## **II. Conclusion**

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at her earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: September 17, 2010

By:   
Fang Liu, Ph.D.  
Registration No. 51283

**Customer No. 21839**  
703 836 6620

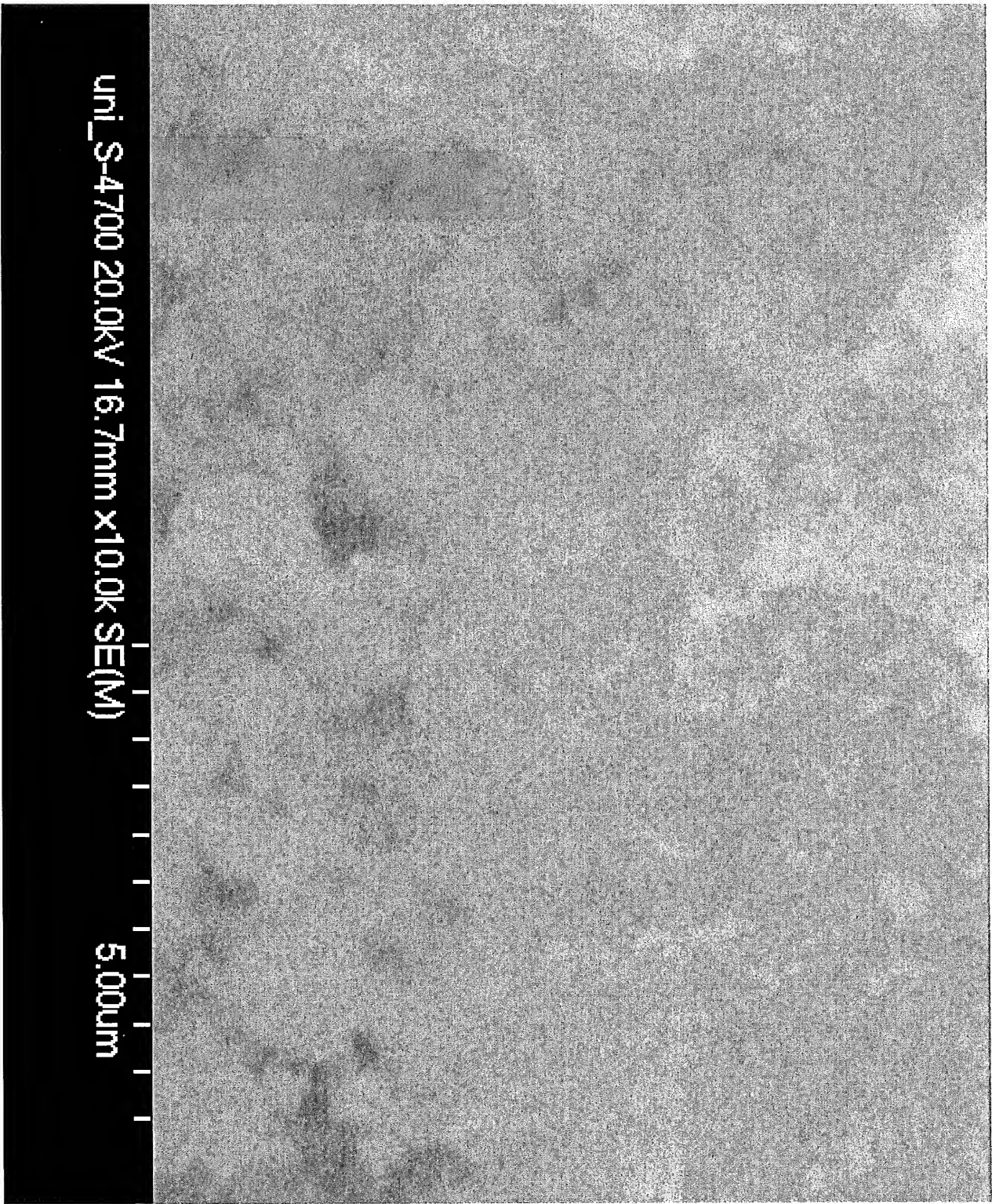


Photo 1



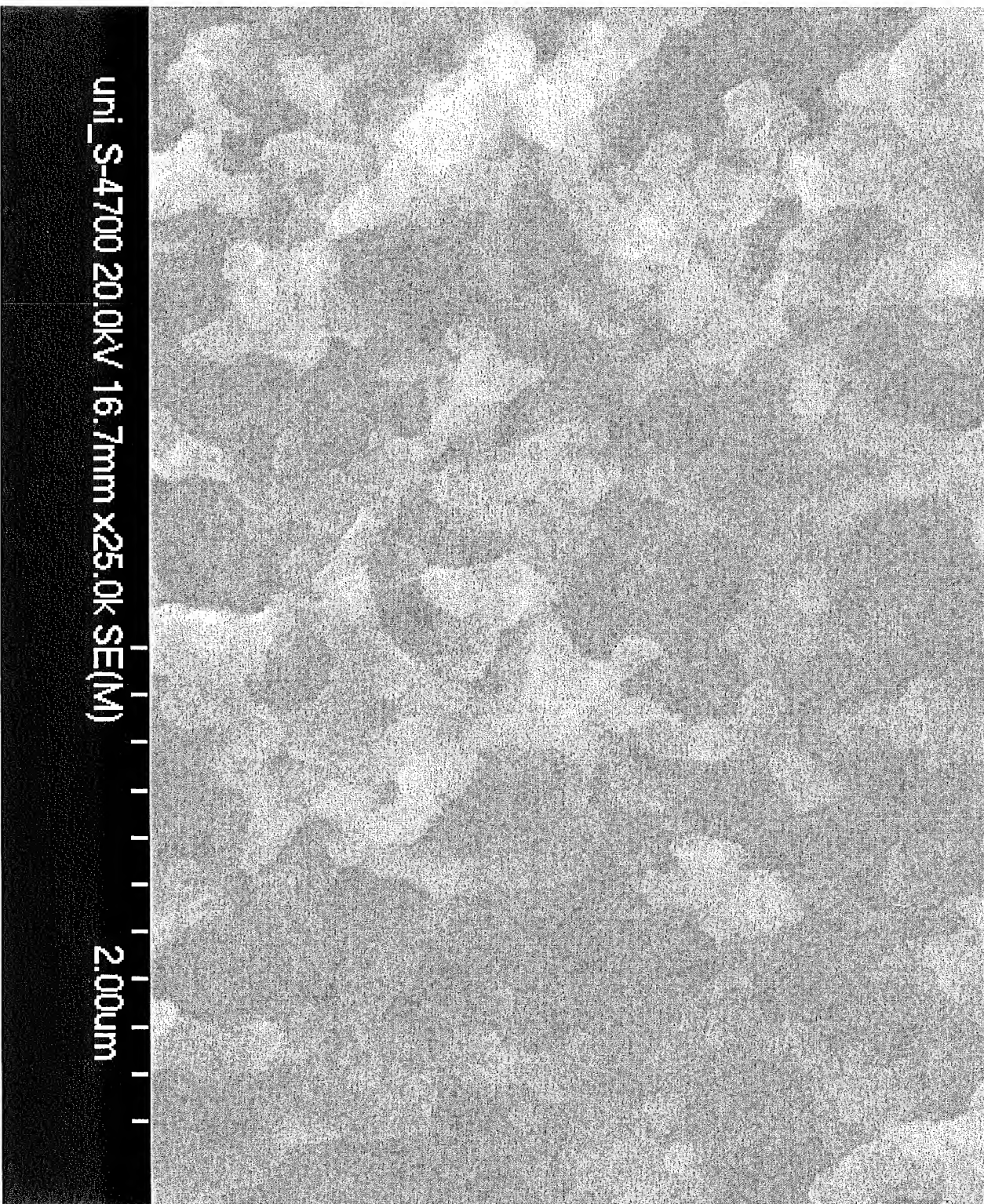
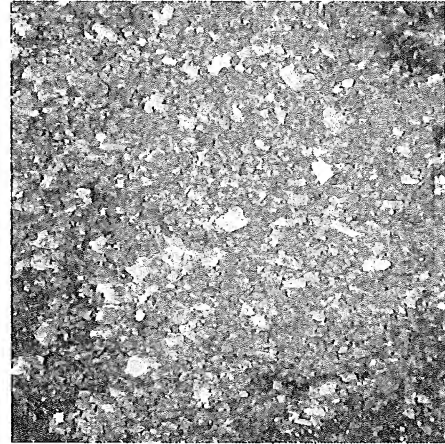
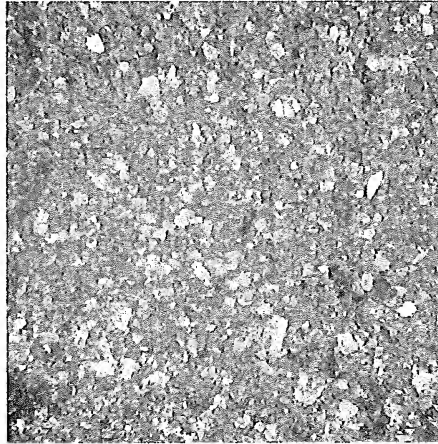
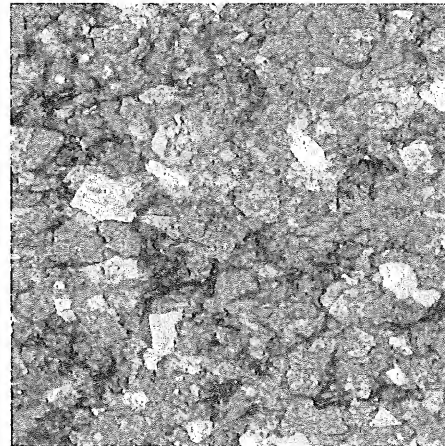


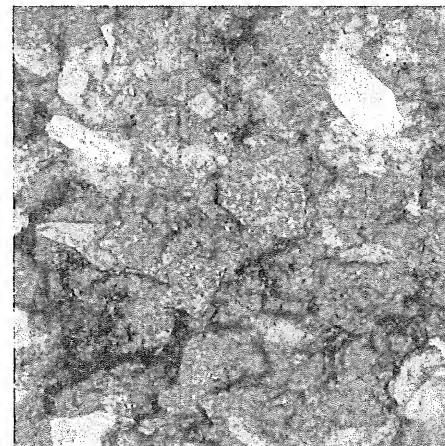
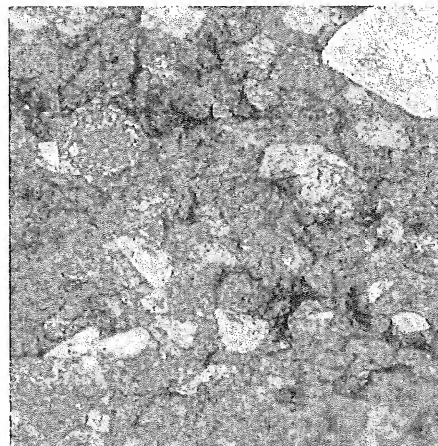
Photo 2



250倍



1000倍



2000倍

Photo 3